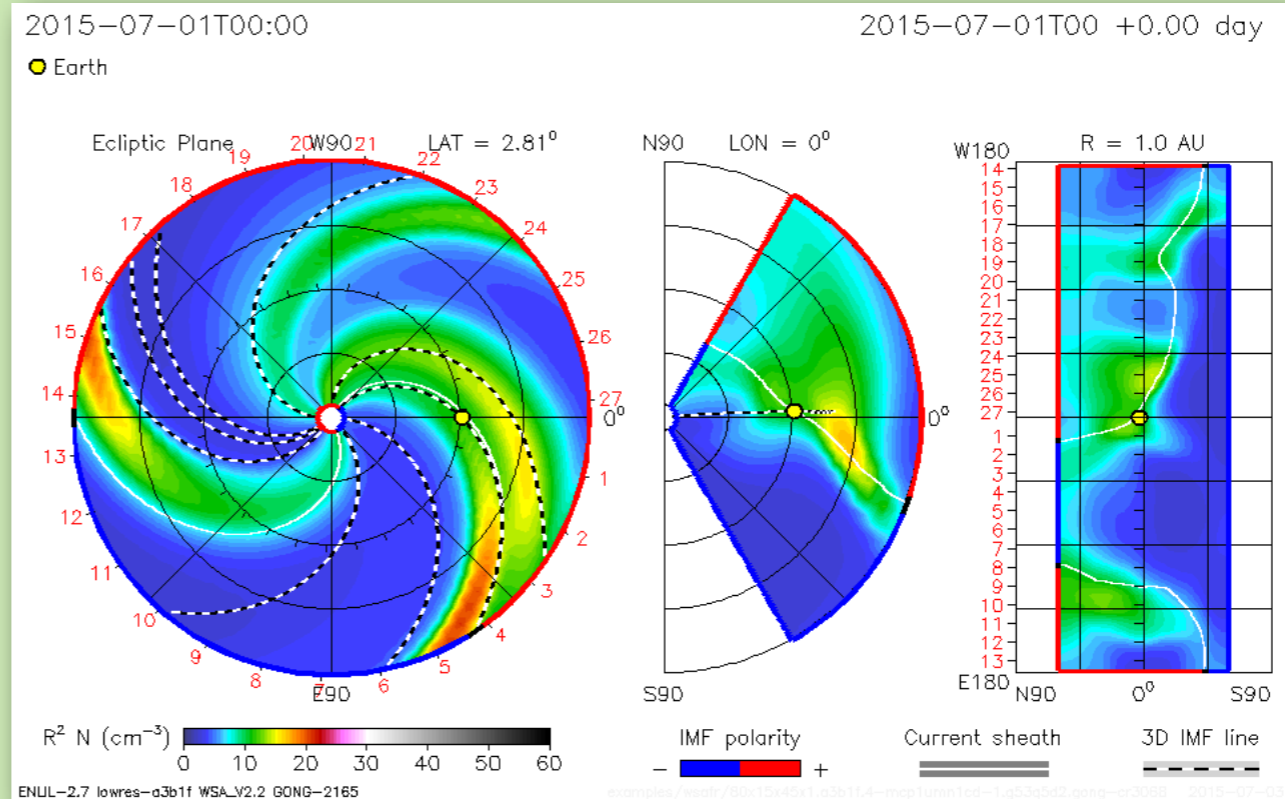
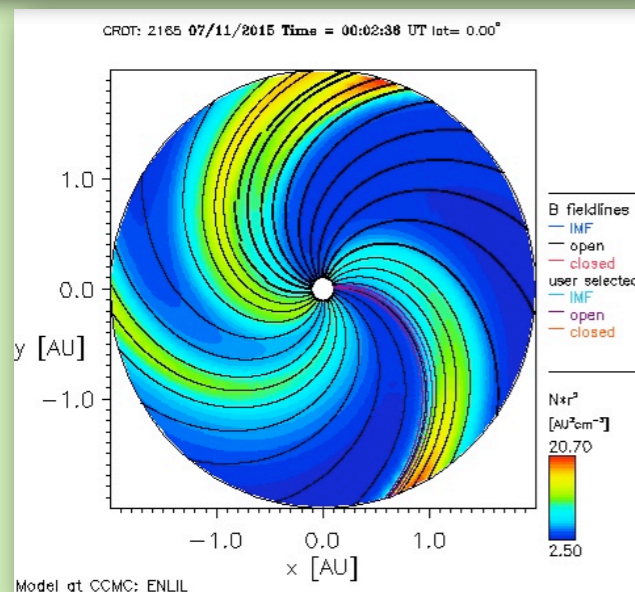
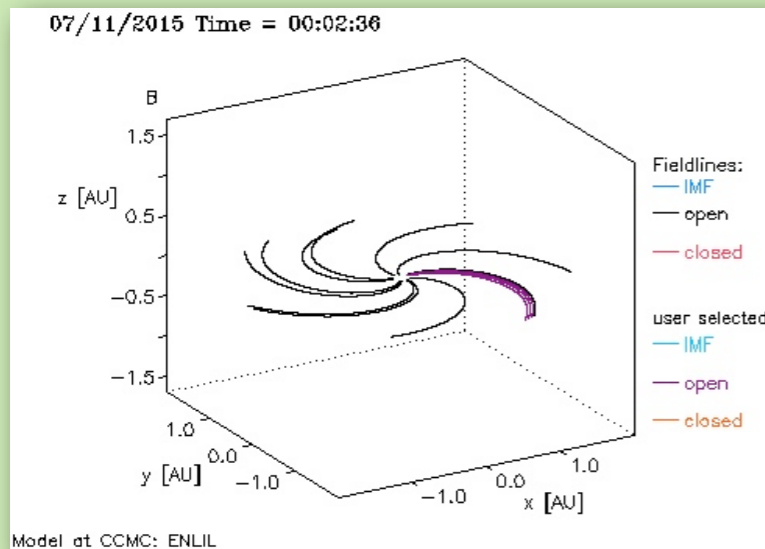


LEGACY RUNS-ON-REQUEST VISUALIZATION

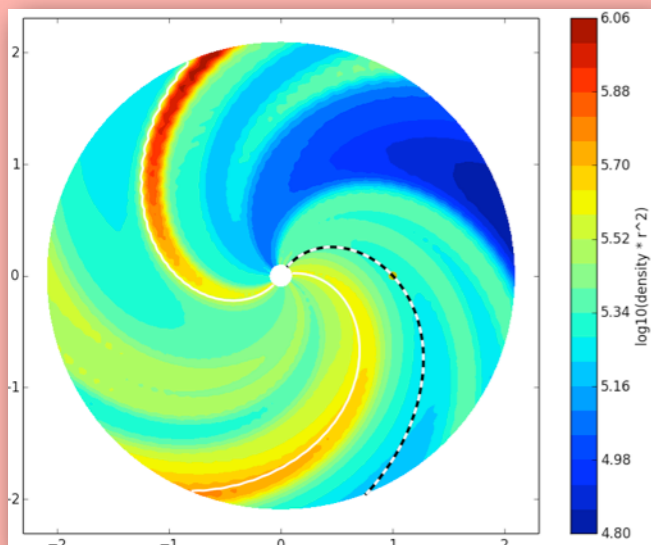


Visualization capabilities:

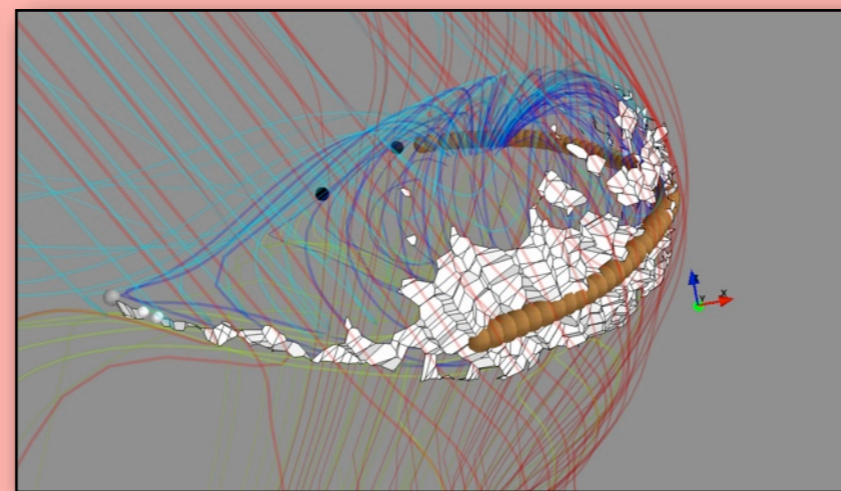
- Predefined “quick look” graphics (1-click)
- Field lines colored by topology
- Slices of custom variables ($N \cdot r^2$)
- Vector Glyphs

Limitations:

- Static Images are not interactive
- Scaling/zooming cumbersome
- Custom variables on request
- Limited to IDL feature set



Can create similar plots to IDL above



Topology analysis, 3D vis (magnetosphere)

KAMELEON-PYTHON VISUALIZATION

The Kameleon library provides an API for several RoR models, which allows us to build flexible applications for visualization, utilizing powerful python libraries:

matplotlib
pandas
mayavi
vtk

scipy
numpy
bokeh

KAMELEON-LIVE

A NEW WEB INTERFACE FOR RUNS-ON-REQUEST

Kameleon-live aims to modernize the runs-on-request visualization pipeline.

Canvas features for Fall '15:

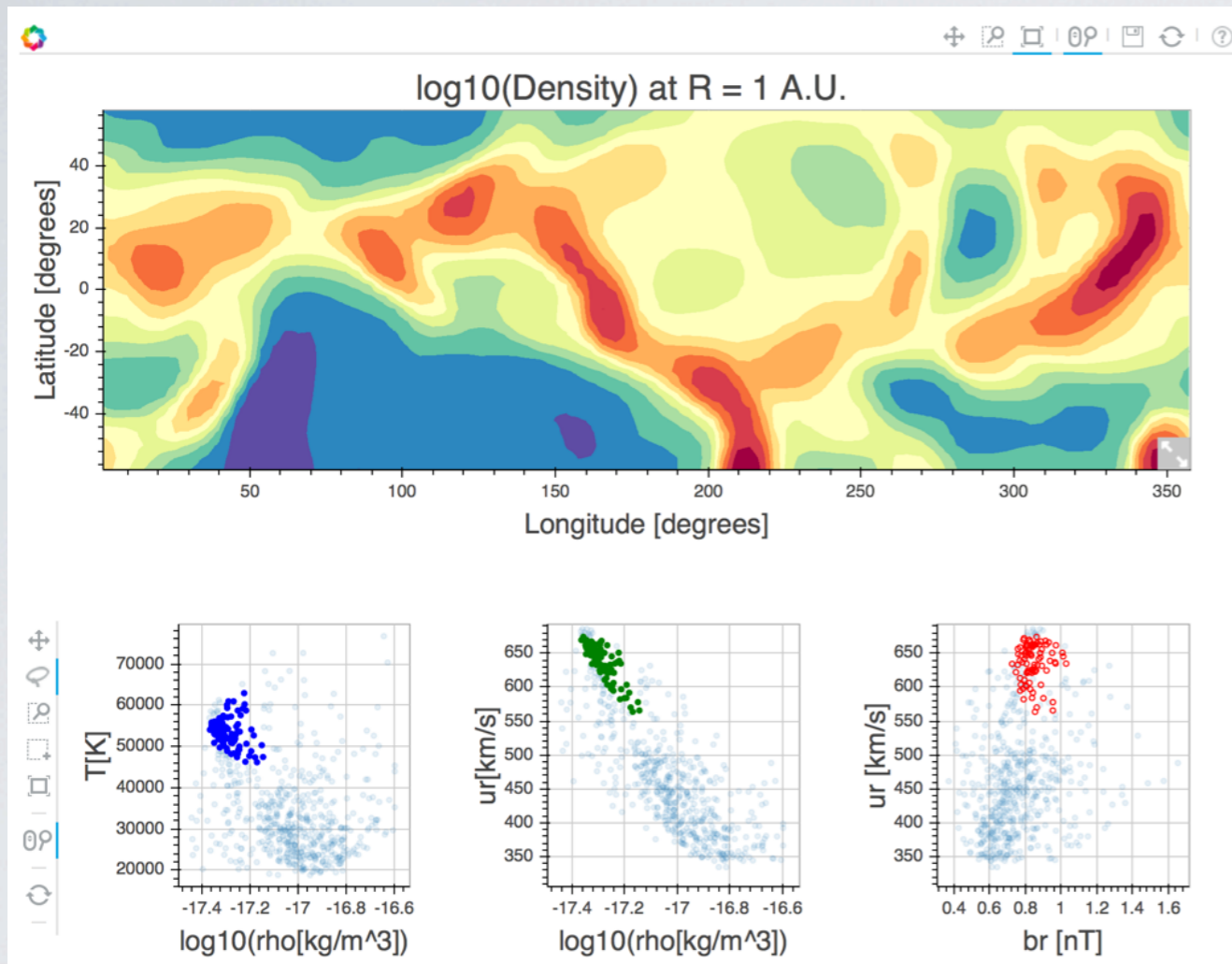
- Canvas of moveable, resizable plots
- Zoomable axes, linked accross plots
- Lasso tool for scattered point data
- Time series analysis, histograms
- Compare output from multiple models
- Trace 3D Fieldlines through multiple models

Potential Community features:

- User logins - customize workflow
- Run-specific wiki for collaborative analysis
- Data-model comparisons

Interactive plots:

- Resize/zoom/pan linked plots
- Lasso tool - find hidden correlations among multiple parameters



What features
interest you?